

Application No. 10/686,951
Attorney Docket No. 2003B043/2
Reply to Office Action dated January 3, 2007
Response dated May 10, 2007

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REMARKS:

Applicants wish to thank the Examiner for the courtesies extended during the in-person interview of February 23, 2007.

Reconsideration of this application is requested. Claims 1-15, 17, 18, 20-71, 109-116, 171-184 and 360-375 are currently pending. Claim 1 has been amended to encompass the features of claims 16 and 19, now cancelled.

Claims 427 through 430 have been added. Support for these claims can be found at [0095] and [0096]. Therefore no new matter has been presented.

Rejection Under 35 U.S.C. § 102(e)

The Examiner has rejected claims 1-14, 16-17, 19-20, 29-55, 64-71, 109-112, 114-116 and 171-184 as anticipated by U.S. Patent No. 6,573,350 to Markel, et al. (hereinafter "Markel"). Applicants respectfully traverse the rejection and request reconsideration.

The present claimed invention relates to adhesives comprising polymers of C₃₋₄₀ olefins having a Dot T-Peel of 1 Newton or more, a branching index (g') of 0.95 or less measured at the z-average molecular weight (Mz) of the polymer, a weight average molecular weight (Mw) of 100,000 or less, and good strength properties. As amended, the adhesive of claim 1 (on which all other claims depend) comprises a polymer having an amorphous content of at least 50% and a crystallinity of at least 5%. Markel discloses branched ethylene-propylene compositions with improved melt strength and a weight average branching index (g') of less than 0.95.

Anticipation requires a showing that each limitation of a claim is found in a single reference, either expressly or inherently. *Crown Operations Int'l Ltd. v. Solutia Inc.* 289 F.3d 1367, 1375-77 (Fed. Cir. 2002). The Examiner must offer evidence of literal presence or a reasoned explanation that every element of the claim is present in the cited prior art inherently. Applicants respectfully assert that the Examiner has not shown that all elements of each claim of the present invention are found in a single prior art reference.

The polymer of the application has an amorphous, crystalline and branch-block molecular structure (see [0095]). Claim 1 discloses these features. The branch-block feature is evidenced

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by the branching index (g') aspect. The polymer of Claim 1 differs from the polymer disclosed in Markel because the Markel polymer will not have all three of these features at the same time, to this degree, since he uses only one catalyst. The consequences of using only one catalyst are that only an amorphous or a crystalline polymer will result. The present application uses two catalysts (see [0106], et al.), one to make an amorphous component and one to make a crystalline component of the polymer. As described further in the background section, this is highly advantageous.

Therefore, all of the elements of each claim in the present application are not found in the Markel reference. Applicants respectfully assert that this rejection should be withdrawn.

Rejection Under 35 U.S.C. § 103(a)

The Examiner has rejected claims 23-25, 56-63 and 360-375 as obvious based on U.S. Patent No. 6,573,350 to Markel, et al. (hereinafter "Markel") in view of U.S. Patent No. 6,084,010 to Baetzold, et al. (hereinafter "Baetzold"). Applicants respectfully traverse the rejection and request reconsideration.

As mentioned above, as amended, the adhesive of claim 1 (on which all other claims depend) comprises a polymer having amorphous, crystalline and branch-block molecular structures. Markel does not disclose or suggest these features all existing in the same polymer at the same time. In fact, Markel specifically states in claim 1, among other places, that his composition is only "semi-crystalline."

The Baetzold reference was cited to merely show that compositions are taught to advantageously comprise tackifier resins, oil or phthalate plasticizers, wax and other various additives.

Therefore, alone or in combination, Markel and/or Baetzold fail to teach or suggest an adhesive comprising polymers of C_{3-40} olefins having a Dot T-Peel of 1 Newton or more, a branching index (g') of 0.95 or less measured at the z-average molecular weight (M_z) of the polymer, a weight average molecular weight (M_w) of 100,000 or less, and having an amorphous content of at least 50% and a crystallinity of at least 5%. Therefore the Applicants respectfully submit that all pending claims are patentable and non-obvious over Markel and/or Baetzold.

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Conclusion

In light of the above, Applicants respectfully request reconsideration and withdrawal of the rejection and allowance of the claims. Should the Examiner have any questions or if he believes it will expedite or assist his examination, he is invited and encouraged to telephone the undersigned attorney at his convenience.

Respectfully submitted,

5/9/07
Date


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